

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Group Art Unit - Unknown

In re

Patent Application of

Vincent L. Chiang, et al.

Serial No.: Unknown

Filed: November _____, 2001

Examiner: Unknown

"METHOD FOR ENHANCING CELLULOSE AND
MODIFYING LIGNIN BIOSYNTHESIS IN PLANTS"

I, Leslie Lindsay, hereby certify that this correspondence is being deposited with the US Postal Service as "Express Mail" Post Office to Addressee," mailing Label Number EL3539869113, Box PCT, Commissioner for Patents, Washington, DC 20231, on the date of my signature.

Leslie Lindsay
Signature

11-19-01
Date of Signature

SEQUENCE LISTING STATEMENT

Box PCT
Commissioner for Patents
Washington, DC 20231

Sir:

The Sequence Listing in this filing under 35 U.S.C. 371, is identical to the computer readable copy of the Sequence Listing in International Application No. PCT/US00/13637, filed May 18, 2000. In accordance with 37 CFR 1.821(e), please use the computer readable form filed in that application as the computer readable form for the instant application.

It is understood that the U.S. Patent and Trademark Office will make the necessary change in application number and filing date for the instant application. A paper copy of the Sequence Listing was included in the originally-filed specification in the instant application.

Respectfully submitted,

Sara D. Vinarov
Sara D. Vinarov
Reg. No. 48,524

File No. 066040-9675

Michael Best & Friedrich LLP
One South Pinckney Street
P.O. Box 1806
Madison, WI 53701-1806
(608) 257-3501

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Per/371



RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/980,043

DATE: 03/27/2002
TIME: 14:51:09

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2 <120> TITLE OF INVENTION: METHOD FOR ENHANCING CELLULOSE AND MODIFYING LIGNIN
3 BIOSYNTHESIS IN PLANTS
4 <130> FILE REFERENCE: 66040/9675
5 <140> CURRENT APPLICATION NUMBER: 09/980,043
6 <141> CURRENT FILING DATE: 2001-11-19
7 <150> PRIOR APPLICATION NUMBER: PCT/US00/13637
8 <151> PRIOR FILING DATE: 2000-05-18
9 <150> PRIOR APPLICATION NUMBER: 60/135,280
10 <151> PRIOR FILING DATE: 1999-05-21
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25 1 5 10
26 cag gtg ggg cat gat gca aat ggg gag cta ttt gtg gct tgc cat gag 158
27 Gln Val Gly His Asp Ala Asn Gly Glu Leu Phe Val Ala Cys His Glu
28 15 20 25 30
29 tgt agc tat ccc atg tgc aag tct tgt ttc gag ttt gaa atc aat gag 206
30 Cys Ser Tyr Pro Met Cys Lys Ser Cys Phe Glu Phe Glu Ile Asn Glu
31 35 40 45
32 ggc cgg aaa gtt tgc ttg cgg tgt ggc tgc cca tat gat gag aac ttg 254
33 Gly Arg Lys Val Cys Leu Arg Cys Gly Ser Pro Tyr Asp Glu Asn Leu
34 50 55 60
35 ctg gat gat gta gaa aag aag ggg tct ggc aat caa tcc aca atg gca 302
36 Leu Asp Asp Val Glu Lys Lys Gly Ser Gly Asn Gln Ser Thr Met Ala
37 65 70 75
38 tct cac ctc aac gat tct cag gat gtc gga atc cat gct aga cat atc 350
39 Ser His Leu Asn Asp Ser Gln Asp Val Gly Ile His Ala Arg His Ile
40 80 85 90
41 agt agt gtg tcc act gtg gat agt gaa atg aat gat gaa tat ggg aat 398
42 Ser Ser Val Ser Thr Val Asp Ser Glu Met Asn Asp Glu Tyr Gly Asn
43 95 100 105 110
44 cca att tgg aag aat cgg gtg aag agc tgt aag gat aaa gag aac aag 446

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50	aca gaa cag cag atg gaa gag aaa ccg tct gca gag gct tcg gag ccg	542
51	Thr Glu Gln Gln Met Glu Glu Lys Pro Ser Ala Glu Ala Ser Glu Pro	
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53	ctt tca att gtt tat cca att cca cgc aac aag ctc aca cca tac aga	590
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63	Val Ile Cys Glu Ile Trp Phe Ala Phe Ser Trp Val Leu Asp Gln Phe	
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69	Ala Arg Tyr Glu Arg Glu Gly Glu Pro Ser Gln Leu Ala Gly Val Asp	
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71	ttt ttc gtg agt act gtt gat ccg ctg aag gaa ccg cca ttg atc act	878
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75	Ala Asn Thr Val Leu Ser Ile Leu Ala Val Asp Tyr Pro Val Asp Lys	
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77	gtc tcc tgc tac gtg tct gat gat ggt gca gct atg ctt tca ttt gaa	974
78	Val Ser Cys Tyr Val Ser Asp Asp Gly Ala Ala Met Leu Ser Phe Glu	
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81	Ser Leu Val Glu Thr Ala Glu Phe Ala Arg Lys Trp Val Pro Phe Cys	
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83	aaa aaa ttc tca att gaa cca aga gca ccg gag ttt tac ttc tca cag	1070
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92	gcc ctg gta gca aag gct cag aaa aca cct gaa gaa gga tgg act atg	1214
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98	cat gat tca ggt ctt cct tgg gaa ata ctg gga gct cgt gac att gaa							1310
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106		435		440		445		
107	gtg tct gca gta ctc aca aat gct ccc tac atc ctc aat gtt gat tgt							1454
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110	gat cac tat gta aac aat agc aag gct gtt cga gag gca atg tgc atc							1502
111	Asp His Tyr Val Asn Asn Ser Lys Ala Val Arg Glu Ala Met Cys Ile							
112		465		470		475		
113	ctg atg gac cca caa gta ggt cga gat gta tgc tat gtg cag ttc cct							1550
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125	ggc tac ggg cct cct tct atg ccc agc tta cgc aag aga aag gat tct							1742
126	Gly Tyr Gly Pro Pro Ser Met Pro Ser Leu Arg Lys Arg Lys Asp Ser							
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135	Ala Ile Phe Asn Leu Thr Glu Ile Asp Asn Tyr Asp Glu His Glu Arg							
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137	tca atg ctg atc tcc cag ttg agc ttt gag aaa act ttt ggc tta tct							1934
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148	655 660 665 670	
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179	tca gcc cat ctc ttt gcg gtc ttc cag gga ttc tta aaa atg ttg gct	2606
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182	ggc atc gat acg aac ttc act gtc aca gca aaa gca gcc gaa gat gca	2654
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208   975
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224       35               40               45
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226       50               55               60
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228       65               70               75               80
229   Leu Asn Asp Ser Gln Asp Val Gly Ile His Ala Arg His Ile Ser Ser
230               85               90               95
231   Val Ser Thr Val Asp Ser Glu Met Asn Asp Glu Tyr Gly Asn Pro Ile
232       100              105              110
233   Trp Lys Asn Arg Val Lys Ser Cys Lys Asp Lys Glu Asn Lys Lys Lys
234       115              120              125
235   Lys Arg Ser Pro Lys Ala Glu Thr Glu Pro Ala Gln Val Pro Thr Glu
236       130              135              140
237   Gln Gln Met Glu Glu Lys Pro Ser Ala Glu Ala Ser Glu Pro Leu Ser
238       145              150              155              160
239   Ile Val Tyr Pro Ile Pro Arg Asn Lys Leu Thr Pro Tyr Arg Ala Val
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241   Ile Ile Met Arg Leu Val Ile Leu Gly Leu Phe Phe His Phe Arg Ile

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